вышении pCO_2 >43,5 мм рт ст. документировано ОШ 3,15 (95%ДИ: 1,8916- 0,4062). Мера определенности полученной модели по критерию псевдо R^2 Nagelkerke - 263,5 соответствует отличному качеству прогностической способности математической модели. Разработанная прогностическая модель, включающая переменный S100β и независимые переменные в качестве предикторов плохого исхода NSE, pCO_2, GCS и Hb, достигла точки отсечения 84,51%, AUC - 0,88 с высокими уровнями чувствительности и специфичности: 91,89% и 64,14%, соответственно. Созданная авторами модель может быть использована для прогнозирования исхода у больных с острой церебральной патологией.

რეზიუმე

S100β-ს დონე სისხლის შრატში, როგორც გამოსავლის პროგნოზული ფაქტორი თავის ტვინის მეორადი დაზიანებების დროს

ა.ტოკშილიკოვა, ჟ.სარკულოვა, გ.კაბდრახმანოვა, მ.სარკულოვი, ა.უტეპკალიევა, ა.ხამიდულა, ბ.კალიევა

დასავლეთ ყაზახეთის მარატ ოსპანოვის სახ. სამედიცინო უნივერსიტეტი, ყაზახეთი

კვლევა ეძღვნება თავის ტვინის ნეიროსპეციფიკური მარკერების პროგნოზული ღირებულების და მისი დაზიანების გამოსავლის მაჩვენებლების შეფასებას.

კვლევის მიზანს წარმოადგენდა S100β-ს პროგნოზული მნიშვნელობის განსაზღვრა, როგორც სიკვდილობის პრედიქტორისა თავის ტვინის სისხლძარღვოვანი და ტრავმული დაზიანებების დროს.

ჩატარებულია 219 პაციენტის პროსპექტული კოჰორტული კვლევა. სისხლის შრატში ნეიროსპეციფიკური მარკერები (S100β, NSE) და გლუკოზა, მჟავა-ტუტოვანი წონასწორობა და არტერიული სისხლის გაზოვანი შემადგენლობა გაანალიზებულია პაციენტის შემოსვლისას, რეანიმაციის განყოფილებაში ყოფნის მე-3, მე-5 და მე-7 დღეს.

არაკეთილსაიმედო გამოსავლის ყველაზე მნიშვნელოვან რისკის ფაქტორს წარმოადგენს მარკერი S100β კვეთის წერტილით 0,2 მკგ/ლ. ანალიზის შედეგები მიუთითებს სტატისტიკურად მნიშვნელოვანი პირდაპირი კავშირის შესახებ S100β>0,2 მკგ/ლ და NSE≥18,9 ნგ/მლ დროს, სხვა ცვლადებთან შედარებით, შანსების თანაფარდობამ შეადგინა 11,9 (95% დასაშვები ინტერვალი: 3,2927-1,6693). სისხლში გლუკოზის მომატებისას 7,4 მმოლ/ლ-ზე მეტად შანსების თანაფარდობამ შეადგინა 3,82 (95% დასაშვები ინტერვალი: 2,1289- 0,5539); გლაზგოს სკალის მიხედვით 13 ქულაზე ნაკლები - 3,69 (95% დასაშვები ინტერვალი: 2,1316- 0,4819); pCO_2 >43,5 mmHg - შანსების თანაფარდობა 3,15 (95% დასაშვები ინტერვალი: 1,8916- 0,4062). მიღებული მოდელის განსაზღვრულობა ფსევდო R^2 Nagelkerke - 263,5 კრიტერიუმის მიხედვით შეესაბამება მათემატიკური მოდელის პროგნოზული შესაძლებლობის უმაღლეს ხარისხს.

აღნიშნული მოდელი შეიძლება გამოყენებული იყოს გამოსავლის პროგნოზირებისათვის მწვავე ცერებრული პათოლოგიის მქონე პაციენტებში.

DOMINANT AEROALLERGENS AND DEMOGRAPHIC FACTORS ASSOCIATED WITH ASTHMA AND ALLERGIC RHINITIS

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Allergic diseases are caused by hyperactivity of the Th2 profile of the adaptive immune system. This hyperreactivity is formed by the overproduction of IgE antibodies [1,2]. IgE antibody-induced diseases have increased significantly in recent years [3] and are related to many factors. Bronchial asthma and allergic rhinitis are among such multifactorial disorders. Therefore, special attention is paid to studying these factors, especially since the results of studies conducted in this direction are quite different. That, in turn, complicates the decision to diagnose these diseases and conduct immunotherapy [7]. Georgia's geographical and climatic peculiarities indicate the importance of studying the clinically significant factors associated with asthma and allergic rhinitis [18]. Thus, our study aimed to identify the dominant allergens in children and adults with asthma and allergic rhinitis and investigate the influence of demographic factors on sensitization to these allergens. The study was conducted using the "cross-sectional" protocol. Nine hundred sixty-four patients aged 6-60 years with asthma and allergic rhinitis were studied. The study was conducted using the "cross-sectional" protocol. It included 964 patients with asthma and allergic rhinitis. Specific IgE antibodies were detected by semi-quantitative immunoblotting using standard 30 respiratory allergens.

Material and methods. The study was conducted using the "cross-sectional" protocol. It included 964 patients registered with the clinical databases of the Department of Allergology and Clinical Immunology of TSMU (Tbilisi Medical State University) in 2015-2018, 501 of whom had bronchial asthma (51.9%) and allergic With rhinitis 463 (48%). Their ages ranged from 6 to 69 years (mean age 22.7 years). Of these, 531-male, 433-female (ratio 1.2) most common age 17–28 years. The GINA (Asthma) and ARIA (Rhinitis) guidelines were used to diagnose asthma and allergic rhinitis.

The probable dominant factors (sex, age, residence, geographical region, genetic predisposition) responsible for allergy sensitization were also identified through a patient survey. Specific IgE antibodies were detected by semi-quantitative immunoblotting using standard 30 respiratory allergens (panel-REF-N-A1125). With quantitative and qualitative sensitivity assessments, antibody titers were determined using a special scanner Improvio-C (MEDIWISS-Analytic Gmbh). The diagnostic panel used during the test ("Panel 30 Resp -A") contained 30 "major" standard respiratory allergens (D1-D.pteronyssinus, D2-D. pharinae, D70-Acarus siro, I1-Honey bee venom, I3-Common wasp, I6-Cocroach German, T2-Alder, T3- Birch, T4-Hazel, T7-Oak white, Gx-Mixed grass, G12-Rye(pollen), W1-Ragweed, W2-Ragweed short, W6-Mugwort, W7-Oxey daisy, W9-Plantain, W20-Nettle, W206-Camomile, K82-Latex, M1-Penicillium notatum, M2-Cladosporium herbatum, M3-Aspergillus fumigatus , M6-Alternaria alternata, E1-Cat epithel, E3-Horse epithel, E5-Dog epithel, E6-Guinea pig epithel, E82-Rabbit epithel, E84-Golden hamster epithel). IgE antibody concentrations were assessed in IU / ml units, and the degree of sensitization was assessed by a seven-point system, respectively: negative, class-0 (0.00-0.34 IU / ml); Marginal, Class-1 (0.35-0.69 IU / ml); Slight increase, class-2 (0.70-3.49 IU / ml); Sharp increase, class-3 (3,50-17,49 IU / ml); High, Class-4 (17.5-49.9 IU / ml); Very high, class-5 (50-100 IU / ml); Extremely high, class-6 (> 100 IU / ml).

Database creation, sorting and statistical analysis were performed by Microsoft Excel 2010, SPSS 21. These "packages" were applied to perform descriptive statistics, compare variables with the T-test, Forest plot analysis, and calculate the Odds Ratio using a random effect model with a 95% confidence interval.

Results and discussion. 964 patients with bronchial asthma and allergic rhinitis underwent 28,920 tests using a standard panel ("Panel 30 Resp-A") with 30 major respiratory allergens. Of these, 19830 (70.7%) were negative, and 8200 (29.3%) were positive. Analysis of positive tests revealed ten main allergens associated with asthma and rhinitis (D1, D2, D70, GX, W20, M2, M6, E3, E5, E6), with the most positive results. The following trends were revealed by the intensity, numerical and class evaluation of susceptibility to these allergens (Fig. 1).

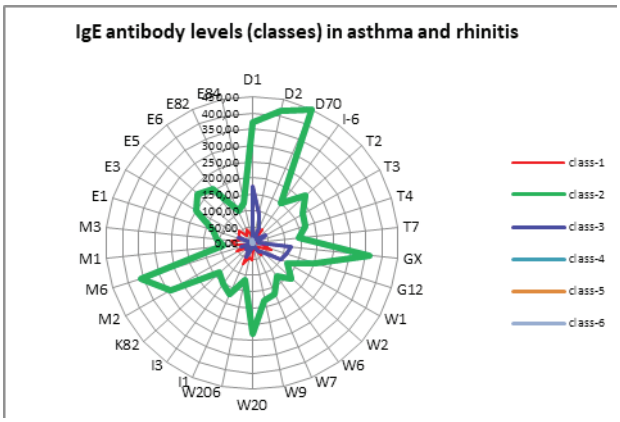
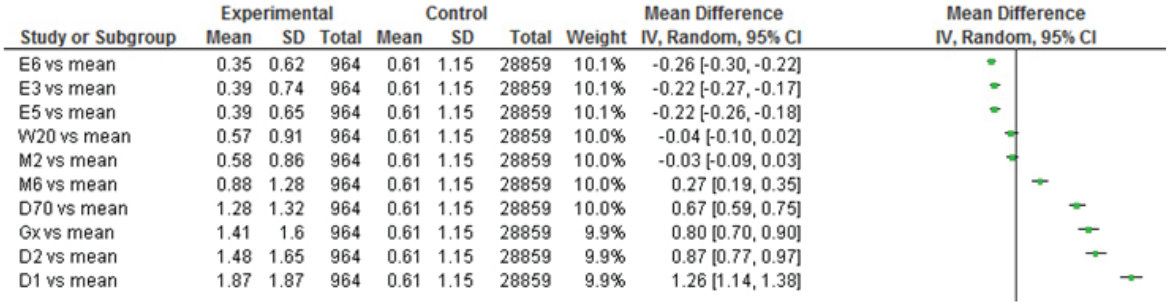


Fig. 1. Boundaries of IgE antibodies to respiratory allergens

In particular, from a total of 8200 positive tests, a clinically significant (marginal and higher) increase in specific IgE antibodies was observed in the following decreasing sequence: slight increase - (Class-2) 6114 (74.6%); Significant increase (Class-3), 1035 (12.6%); Marginal increase (Class-1), 1035 (12.6%); Extreme Increase (Class-6), 17 (0.21%); Very strong increase (Class-5), 2 (0.02%); Strong increase (Class-4), 0%. Figure 1. Figure shows the concentrations of specific IgE antibodies (UI / ml) to the airborne allergens in the Panel 30 Resp –A by classes.

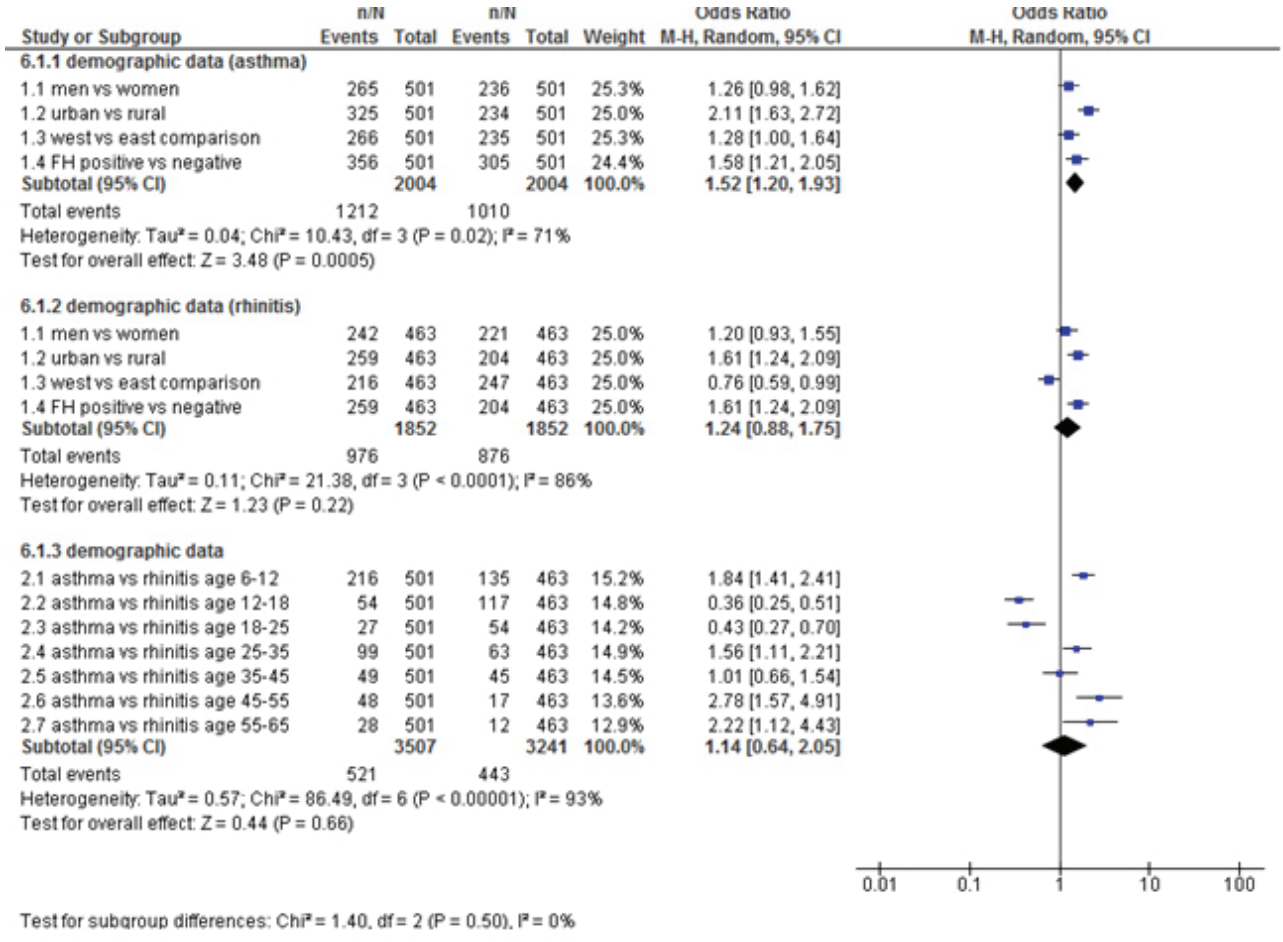
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	Mean Difference IV, Random, 95% CI
D70 vs Gx	1.28	1.32	964	1.41	1.6	964	3.6%	-0.13 [-0.26, 0.00]
E3 vs E5	0.39	0.74	964	0.39	0.65	964	3.6%	0.00 [-0.06, 0.06]
E5 vs E6	0.39	0.65	964	0.35	0.62	964	3.6%	0.04 [-0.02, 0.10]
D2 vs Gx	1.48	1.65	964	1.41	1.6	964	3.5%	0.07 [-0.08, 0.22]
W20 vs E5	0.57	0.91	964	0.39	0.74	964	3.6%	0.18 [0.11, 0.25]
W20 vs E3	0.57	0.91	964	0.39	0.74	964	3.6%	0.18 [0.11, 0.25]
W20 vs E6	0.57	0.91	964	0.35	0.62	964	3.6%	0.22 [0.15, 0.29]
D1 vs D2	1.87	1.87	964	1.48	1.65	964	3.5%	0.39 [0.23, 0.55]
D1 vs Dx	1.87	1.87	964	1.41	1.6	964	3.5%	0.46 [0.30, 0.62]
E3 vs E6	0.96	0.74	964	0.35	0.62	964	3.6%	0.61 [0.55, 0.67]
D1 vs D70	1.87	1.87	964	1.23	1.32	964	3.5%	0.64 [0.50, 0.78]
D70 vs W20	1.28	1.32	964	0.57	0.91	964	3.6%	0.71 [0.61, 0.81]
Gx vs W20	1.41	1.6	964	0.57	0.91	964	3.6%	0.84 [0.72, 0.96]
D70 vs E3	1.28	1.32	964	0.39	0.74	964	3.6%	0.89 [0.79, 0.99]
D70 vs E5	1.28	1.32	964	0.39	0.65	964	3.6%	0.89 [0.80, 0.98]
D2 vs D70	1.48	1.65	964	0.57	0.91	964	3.6%	0.91 [0.79, 1.03]
D2 vs W20	1.48	1.65	964	0.57	0.91	964	3.6%	0.91 [0.79, 1.03]
D70 vs E6	1.28	1.32	964	0.35	0.62	964	3.6%	0.93 [0.84, 1.02]
Gx vs E3	1.41	1.6	964	0.39	0.74	964	3.6%	1.02 [0.91, 1.13]
Gx vs E5	1.41	1.6	964	0.39	0.74	964	3.6%	1.02 [0.91, 1.13]
Dx vs E6	1.41	1.6	964	0.35	0.62	964	3.6%	1.06 [0.95, 1.17]
D2 vs E3	1.48	1.65	964	0.39	0.74	964	3.6%	1.09 [0.98, 1.20]
D2 vs E5	1.48	1.65	964	0.39	0.65	964	3.6%	1.09 [0.98, 1.20]
D2 vs E6	1.48	1.65	964	0.35	0.62	964	3.6%	1.13 [1.02, 1.24]
D1 vs W20	1.87	1.87	964	0.57	0.91	964	3.6%	1.30 [1.17, 1.43]
D1 vs E3	1.87	1.87	964	0.39	0.74	964	3.6%	1.48 [1.35, 1.61]
D1 vs E5	1.87	1.87	964	0.39	0.65	964	3.6%	1.48 [1.36, 1.60]
D1 vs E6	1.87	1.87	964	0.35	0.62	964	3.6%	1.52 [1.40, 1.64]

Fig. 2. Comparison of mean concentrations of allergen-specific IgE antibodies (UI/ml)



Study or Subgroup	Experimental Mean	SD	Total	Control Mean	SD	Total	Weight	Mean Difference IV, Random, 95% CI
E6 vs mean	0.35	0.62	964	0.61	1.15	28859	10.1%	-0.26 [-0.30, -0.22]
E3 vs mean	0.39	0.74	964	0.61	1.15	28859	10.1%	-0.22 [-0.27, -0.17]
E5 vs mean	0.39	0.65	964	0.61	1.15	28859	10.1%	-0.22 [-0.26, -0.18]
W20 vs mean	0.57	0.91	964	0.61	1.15	28859	10.0%	-0.04 [-0.10, 0.02]
M2 vs mean	0.58	0.86	964	0.61	1.15	28859	10.0%	-0.03 [-0.09, 0.03]
M6 vs mean	0.88	1.28	964	0.61	1.15	28859	10.0%	0.27 [0.19, 0.35]
D70 vs mean	1.28	1.32	964	0.61	1.15	28859	10.0%	0.67 [0.59, 0.75]
Gx vs mean	1.41	1.6	964	0.61	1.15	28859	9.9%	0.80 [0.70, 0.90]
D2 vs mean	1.48	1.65	964	0.61	1.15	28859	9.9%	0.87 [0.77, 0.97]
D1 vs mean	1.87	1.87	964	0.61	1.15	28859	9.9%	1.26 [1.14, 1.38]

Fig. 3. Comparison of mean IgE antibodies (UI/ml) of each allergen with mean of all dominant allergens



Study or Subgroup	n/N Events	Total	n/N Events	Total	Weight	Odds Ratio M-H, Random, 95% CI
6.1.1 demographic data (asthma)						
1.1 men vs women	265	501	236	501	25.3%	1.26 [0.98, 1.62]
1.2 urban vs rural	325	501	234	501	25.0%	2.11 [1.63, 2.72]
1.3 west vs east comparison	266	501	235	501	25.3%	1.28 [1.00, 1.64]
1.4 FH positive vs negative	356	501	305	501	24.4%	1.58 [1.21, 2.05]
Subtotal (95% CI)		**2004**		**2004**	**100.0%**	**1.52 [1.20, 1.93]**
Total events	1212		1010			
Heterogeneity: Tau² = 0.04; Chi² = 10.43, df = 3 (P = 0.02); I² = 71%						
Test for overall effect: Z = 3.48 (P = 0.0005)						
6.1.2 demographic data (rhinitis)						
1.1 men vs women	242	463	221	463	25.0%	1.20 [0.93, 1.55]
1.2 urban vs rural	259	463	204	463	25.0%	1.61 [1.24, 2.09]
1.3 west vs east comparison	216	463	247	463	25.0%	0.76 [0.59, 0.99]
1.4 FH positive vs negative	259	463	204	463	25.0%	1.61 [1.24, 2.09]
Subtotal (95% CI)		**1852**		**1852**	**100.0%**	**1.24 [0.88, 1.75]**
Total events	976		876			
Heterogeneity: Tau² = 0.11; Chi² = 21.38, df = 3 (P < 0.0001); I² = 86%						
Test for overall effect: Z = 1.23 (P = 0.22)						
6.1.3 demographic data						
2.1 asthma vs rhinitis age 6-12	216	501	135	463	15.2%	1.84 [1.41, 2.41]
2.2 asthma vs rhinitis age 12-18	54	501	117	463	14.8%	0.36 [0.25, 0.51]
2.3 asthma vs rhinitis age 18-25	27	501	54	463	14.2%	0.43 [0.27, 0.70]
2.4 asthma vs rhinitis age 25-35	99	501	63	463	14.9%	1.56 [1.11, 2.21]
2.5 asthma vs rhinitis age 35-45	49	501	45	463	14.5%	1.01 [0.66, 1.54]
2.6 asthma vs rhinitis age 45-55	48	501	17	463	13.6%	2.78 [1.57, 4.91]
2.7 asthma vs rhinitis age 55-65	28	501	12	463	12.9%	2.22 [1.12, 4.43]
Subtotal (95% CI)		**3507**		**3241**	**100.0%**	**1.14 [0.64, 2.05]**
Total events	521		443			
Heterogeneity: Tau² = 0.57; Chi² = 86.49, df = 6 (P < 0.00001); I² = 93%						
Test for overall effect: Z = 0.44 (P = 0.66)						
Test for subgroup differences: Chi² = 1.40, df = 2 (P = 0.50), I² = 0%						

Fig. 4. Frequency of demographic risk factors in patients with asthma and allergic rhinitis

Statistical verification of the results obtained from the presented graphic data (comparison with each other) was performed using blobbograms, calculation of mean differences in IgE antibody concentrations (MD-Mean Difference) and correlation (random effect model, 95% confidence interval). On the first blobbogram (Fig. 2), a statistically significant increase in the mean concentrations of IgE antibodies (UI/ml) to each dominant allergen was observed in only six allergens (in descending order: D1, D2, Gx, D70, E3, and W20).

Comparison of the mean data of each allergen with the mean values of all allergens also revealed 5 (D1, D2, Gx, D70, M6) dominant allergens, for which the level of IgE antibodies was exceptionally high (Fig. 3).

Thus, individuals with allergic rhinitis and bronchial asthma were found to be predominantly sensitized to allergens of house dust mites (D1, D2, D70), mixed grasses (Gx), fungi (M2, M6, E3), and nettle (W20). A particular increase in specific IgE antibodies from these allergens was observed against the mite and herb allergen (D1, D2, D70, Gx). Analysis of demographic data of patients sensitized to these dominant allergens (sex, age, place of residence, geographical location, genetic predisposition) also revealed an association of dominant demographic factors with both diseases (asthma and allergic rhinitis) and individual allergens.

Most people with asthma were genetically predisposed to atopic diseases, and they are women living in cities in western Georgia. Most of the patients with allergic rhinitis were genetically predisposed to atopic states and living in east Georgia. Depending on age, asthma was more common in people aged 6-12, 25-35, 45-55, and 55-65, but allergic rhinitis - between the ages of 12-18 and 18-25 (Fig. 4). This data reveals that these dominant factors may affect the qualitative and quantitative indicators of allergen sensitization.

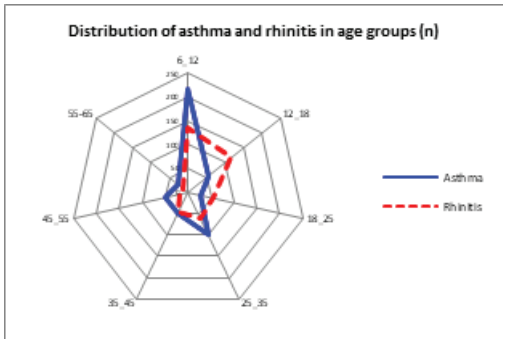


Fig. 5. Incidence of asthma and allergic rhinitis in age groups

This tendency was especially pronounced in patients sensitized to mites and fungi (D1, D2, D70, M2, M6). Even in individuals sensitized to mixed herbs and nettles, no tendency was detected according to demographic factors. In addition, patients sensitive to nettle (W20) were predominantly rural villagers in western Georgia. This tendency was especially pronounced in patients sensitized to mites and fungi (D1, D2, D70, M2, M6). Even in individuals sensitized to mixed herbs and nettles, no tendency was detected according to demographic factors. In addition, patients sensitive to nettle (W20) were predominantly rural villagers in western Georgia (Fig. 3 and Fig. 4).

The results of our study were consistent with other studies that confirmed that patients with bronchial asthma and allergic rhinitis are sensitive to indoor and outdoor allergens, of which house dust mites and fungi are particularly relevant [21–24]. That is allergens whose growth and development depend on air humidity, ventilation, and the presence of carpets and plants in the home [8, 9] and the geographical location and time spent by the patient in the home environment [18]. As in our neighbouring countries Turkey and Iran [28], and seven multicenter studies conducted in 16 European countries, these allergens predominated among the allergens causing asthma and allergic rhinitis [26,27].

Perhaps that is why sensitization against mites and fungi has been detected more often in western Georgia. (This is a humid subtropical region of the sea, where the average annual relative humidity reaches 80-82%. [10] (Best humidity is 75-80%). Similar results have been observed in Iran (Bushehr Province) [12, 17], Japan [13], Singapore, Malaysia and Thailand [14-16], where the relative humidity fluctuates between 80-90%. As for plant dust (mixed grasses and nettle) allergens, which ranked third (after mites) among the dominant allergens in our study, sensitization to them was more common in people living in eastern Georgia. In a region characterized by a transition from a subtropical continental climate to a sea climate, the average annual relative humidity is relatively low, reaching 65-70%. These data more or less agree with the opinion of other authors, according to which the concentration of allergic plant dust increases in specific bioclimatic regions [25].

The relationship between sensitization to dominant allergens and demographic factors has been studied in numerous studies. Due to different research designs and study populations, these results are quite different [30]. For example, in China, Taipei, Indonesia, and Korea, the incidence of tick-borne sensitization is much higher in urbanized areas (80–90%) than in non-urbanized regions (60–80%) [29]. Age-related tendencies of sensitization to dominant allergens have not been identified in our study, which is in complete agreement with the data of other authors who have also obtained inconsistent results. For example, in Taiwan (China), dust mite sensitization was more common in people over the age of 70 (compared to 40 years of age [31], and in Korea, conversely, in those aged 10–20 years compared to 60 years of age [32].

According to various studies, genetic predisposition to atopic diseases is one of the most essential factors in sensitization to aeroallergens (85%) [33,34]. This data entirely agrees with the results of our study, which showed that high sensitivity to all dominant allergens was associated with hereditary.

Thus, airborne allergens are the essential allergens causing allergic diseases of the upper and lower respiratory tract (asthma and rhinitis). Among them, house dust mites, fungal and grass dust allergens are especially prominent. That is allergens whose concentration depends on climatic factors (humidity and temperature). The study confirmed that sensitization towards these dominant allergens is facilitated by such dominant demographic characteristics as a genetic predisposition to atopic diseases, living in urban areas, peculiarities of geographical regions. Consideration of dominant etiological and demographic factors is essential for the successful diagnosis and treatment of respiratory allergies. Since most of the studies in the literature are based on different methodologies and are characterized by relatively high heterogeneity, it is advisable to conduct additional studies in this area to clarify some of the findings further.

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SUMMARY

DOMINANT AEROALLERGENS AND DEMOGRAPHIC FACTORS ASSOCIATED WITH ASTHMA AND ALLERGIC RHINITIS

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Allergic diseases are caused by hyperactivity of the Th2 profile of the adaptive immune system. The overproduction of IgE antibodies forms this hyperreactivity. Asthma and allergic rhinitis belong to this type of multifactorial hypersensitivity disease. The study of the factors contributing to the formation and development of these diseases is of great clinical importance. Different studies interpret the influence of these factors on allergic diseases differently. Our study aimed to identify the dominant allergens in children and adults with asthma and allergic rhinitis and investigate the influence of demographic factors on sensitization to these allergens. 964 patients with bronchial asthma and allergic rhinitis were tested for the presence of sensitization to respiratory allergens. Of these, 203 patients showed positive tests. Most often, positive results were observed against house dust mites, fungi and mixed-grass allergens. Such outcomes were prevalent in patients living in eastern, compared to western Georgia. The study confirmed that sensitization towards these dominant allergens is facilitated by such leading demographic characteristics as a genetic predisposition to atopic diseases, living in urban areas, peculiarities of geographical regions. Successful diagnosis of respiratory allergies and treatment and prevention is impossible without considering the dominant etiological and demographic factors. The heterogeneity of replication studies in the literature suggests that it is advisable to continue them further.

Keywords: demographic factors, respiratory allergies, asthma, allergic rhinitis.

РЕЗЮМЕ

ДОМИНИРУЮЩИЕ АЭРОАЛЛЕРГЕНЫ И ДЕМОГРАФИЧЕСКИЕ ФАКТОРЫ, СВЯЗАННЫЕ С АСТМОЙ И АЛЛЕРГИЧЕСКИМ РИНИТОМ

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Аллергические заболевания вызваны гиперактивностью профиля Th2 адаптивной иммунной системы. Избыточное

производство антител IgE формирует гиперреактивность. Астма и аллергический ринит относятся к типу заболевания многофакторной гиперчувствительности. Изучение факторов, способствующих формированию и развитию указанных заболеваний, имеет большое клиническое значение. Различные исследования по-разному интерпретируют влияние этих факторов на аллергические заболевания.

Проведенное исследование направлено на выявление доминирующих аллергенов у детей и взрослых с астмой и аллергическим ринитом, а также на изучение влияния демографических факторов на сенсибилизацию к этим аллергенам. 964 пациента с бронхиальной астмой и аллергическим ринитом протестированы на наличие сенсибилизации к респираторным аллергенам. Из них 203 пациента показали положительные тесты. Положительные результаты чаще наблюдались в отношении клещей домашней пыли, грибов и аллергенов смешанных трав. Такие исходы преобладали у пациентов, живущих в восточной Грузии в сравненим с западной Грузией. Исследование подтвердило, что сенсибилизации к этим доминирующим аллергенам способствуют такие ведущие демографические характеристики, как генетическая предрасположенность к атопическим заболеваниям, проживание в городских районах, особенности географических регионов. Успешная диагностика респираторной аллергии, ее лечение и профилактика невозможны без учета доминирующих этиологических и демографических факторов. Разнородность исследований репликации в литературе позволяет предположить, что их целесообразно продолжить.

რეზიუმე

ასთმასთან და ალერგიულ რინიტთან დაკავშირებული დომინანტური აეროალერგენები და დემოგრაფიული ფაქტორები

ა. თელია

თბილისის სახელმწიფო სამედიცინო უნივერსიტეტი,
ალერგოლოგიისა და კლინიკური იმუნოლოგიის დეპარტამენტი, საქართველო

ალერგიული დაავადებები გამოწვეულია ადაპტაციური იმუნური სისტემის Th2 პროფილის ჰი-პერაქტიურობით. ამ ტიპის ჰიპერრეაქტიულობაზე პასუხისმგებელია ადაპტაციური იმუნური სისტემა. ასთმა და ალერგიული რინიტი მიეკუთვნება სწორედ ასეთი ტიპის ზემგრძნობელობას. ამ დაავადებების ჩამოყალიბებასა და განვითარებაში ხელშემწყობი ფაქტორების შესწავლას დიდი კლინიკური მნიშვნელობა ენიჭება. სხვადასხვა კვლევა განსხვავებულად ხსნის ამ ფაქტორების გავლენას აღნიშნული დაავადებების განვითარბაზე.

კვლევის მიზანს წარმოადგენდა ასთმით და ალერგიული რინიტით ბავშვებსა და მოზრდილებში დომინანტური ალერგენების იდენტიფიცირებას და დემოგრაფიული ფაქტორების გავლენის გამოკვლევას ამ ალერგენების მიმართ სენსიბილიზაციაზე.

ბრონქული ასთმითა და ალერგიული რინიტით 964 პაციენტს ჩაუტარდა ტესტირება რესპირაციული ალერგენების მიმართ სენსიბილიზაციის არსებობაზე. მათგან 203 პაციენტს გამოუვლინდა დადებითი შედეგები და ყველაზე ხშირად დაფიქსირდა ოთახის მტვრის ტკიპების, სოკოვანი და შერეული ბალახების ალერგენების მიმართ სენსიბილიზაცია. ასეთი მონაცემები დასავლეთ საქართველოსთან შედარებით უფრო მეტად გამოვლინდა აღმოსავლეთ საქართველოში მცხოვრებ პაციენტებში. კვლევამ დაადასტურა, რომ ამ დომინანტური ალერგენების მიმართ სენსიბილიზაციას ხელს უწყობს ისეთი წამყვანი დემოგრაფიული მახასიათებლები, როგორიცაა გენეტიკური მიდრეკილება ატოპიური დაავადებების მიმართ, ურბანულ გარემოში ცხოვრება, გეოგრაფიული რეგიონების თავისებურებები. რესპირაციული ალერგიის წარმატებული დიაგნოზი, მკურნალობა და პრევენცია შეუძლებელია დომინანტური ეტიოლოგიური და დემოგრაფიული ფაქტორების გათვალისწინების გარეშე.